

**Abstract**

The present invention relates to a method of characterising a target base in a sample nucleic acid, which method comprises: (a) contacting the sample nucleic acid with an oligonucleotide primer under conditions which allow hybridisation of the oligonucleotide to the sample nucleic acid, said oligonucleotide primer being labelled with a fluorophore; (b) contacting the sample nucleic acid with a deoxynucleotide or dideoxynucleotide which is labelled with a fluorophore, under conditions which allow extension of the oligonucleotide primer through incorporation of the labelled nucleotide; and (c) measuring the fluorescence emitted by one or both of the fluorophores.

**Appendix**